

The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
William A. Hinton State Laboratory Institute  
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

05/31/2011

Maria Markos  
Assistant District Attorney, Essex County

Dear ADA Markos,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED] Included are copies of the following:

1. Curriculum Vitae for Annie Dookhan & Stacey Desjardins.
2. Drug Analysis Laboratory Receipt.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. GC/Mass Spectral analytical data for samples # [REDACTED]

Stacey Desjardins was the custodial chemist and performed the preliminary testing and net weight for this sample. Annie Dookhan was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read "Annie Dookhan".

Annie Dookhan  
Chemist II  
Drug Analysis Lab  
Jamaica Plain, MA. 02130  
(617) 983-6631

## Curriculum Vitae

### **Annie Khan (Dookhan)**

#### **Education:**

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

#### **Experience:**

2003 – present

#### Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

\*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

\*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.

\*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

\*Maintenance and repairs of all analytical instruments.

\*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

\* Responsible for the Quality Control/Quality Assurance program for the drug lab.

\*Notary Public.

\*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

#### QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

\*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

\*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

\*Writing, revising and reviewing Standard Operating Procedures (SOPs).

\*Trained and supervised new chemists and interns for the department.

\*Routine QC testing of products for the FDA.

\*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

\*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

\*Complete testing of chemicals for Vendor Validation Project for the FDA.

\*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Training:**

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

#### **Association:**

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

# **Stacey Lyn Desjardins**

stacey.feiden@state.ma.us

## **EDUCATION**

**Master of Science—Forensic Science**  
University of New Haven; West Haven, Connecticut  
May 2006

- Concentration: Criminalistics
- Certificate: Advanced Investigation

**Bachelor of Arts—Chemistry**  
Monmouth College; Monmouth, Illinois  
May 2004

- Graduated Cum Laude

## **EXPERIENCE**

### **Chemist I**

Massachusetts Department of Public Health; Jamaica Plain, Massachusetts  
March 2009-present

- Analyze unknown substances submitted by Massachusetts Law Enforcement Agencies
- Operate, maintain, and interpret data from analytical equipment (Gas Chromatograph, analytical balance, microscope, Ultraviolet Spectrometer, Infrared Spectrometer)
- Provide expert testimony to local, state, and federal courts in Massachusetts

### **Teaching/Graduate Assistant**

Monmouth College Chemistry Department  
University of New Haven Forensic Science Department  
January 2001-May 2006

- Supervised labs and answered student questions
- Performed demonstrations using forensic techniques and chemicals

**Additional work experience and references available upon request**

## **TRAINING**

2010: DEA Forensic Chemist Seminar—Washington DC

2009: Multijurisdictional Counterdrug Task Force Training on Current Drug Trends

2009: Six week training with Senior Staff at the Massachusetts Department of Public Health Drug Analysis Laboratory—appointed Assistant Analyst

2005: Internship with the New Hampshire State Crime Lab

## **COURSEWORK**

Biomedical Methods of Forensic Science, Criminal Procedure, Forensic Microscopy, Advanced Criminalistics I and II, Forensic Toxicology, Advanced Investigation I and II, Physical Analysis in Forensic Science, Organic Chemistry I and II, General Chemistry, Analytical Chemistry I and II, Physical Chemistry I, II, and III, Biochemistry, Advanced Inorganic Chemistry

**PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION**

*The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
State Laboratory Institute*

**Boston Drug Laboratory**  
Tel (617) 983-6622  
Fax (617) 983-6625

## Boston Hours

8:00 – 11:00  
2:00 – 4:00

**Amherst Drug Laboratory**  
Tel (413) 545-2601  
Fax (413) 545-2608

**Amherst Hours**  
9:00 – 12:00  
1:00 – 3:00

## **DRUG RECEIPT**

**City or Department:** Yonkers **Police Reference No.:** \_\_\_\_\_

Name and Rank of Submitting Officer: DET. MARK RICHMOND

**Defendant(s) Name (last, first, initial):**

**ANSWER** The answer is (A). The first two digits of the number 1234567890 are 12.

*To be completed by Submitter*

### **Description of Items Submitted**

*To be completed by Lab Personnel*

### Gross Weight

### Lab Number

Received by:

*Eco*

Date: 10-24-08

No. [REDACTED]

Date Analyzed: 05-22-09

City: Lynn Police Dept.

Officer: Detective MARK RICHMOND

Def: [REDACTED]

Amount:

Subst: SUB

No. Cont: 1 Cont: pb

Date Rec'd: 10/24/2008

No. Analyzed: 1

Gross Wt.: 1.84 ✓

Net Weight: 0.19 g

# Tests: 6 SLF

\*2ASD



Prelim: COCAINE

Findings: cocaine

# DRUG POWDER ANALYSIS FORM

SAMPLE # [REDACTED] AGENCY Lynn ANALYST SLF

No. of samples tested: 1 balance Vok Evidence Wt. ✓

PHYSICAL DESCRIPTION: - signed + sealed  
- off white chunky substance  
in pb w/ piece Scotch  
tape

Gross Wt ( ):

Gross Wt ( ): 0.3275g

Pkg. Wt: 0.1371g

Net Wt: 0.1904g

## PRELIMINARY TESTS

### Spot Tests

Cobalt Thiocyanate (H+)

Marquis

Froehde's

Mecke's

### Microcrystalline Tests

Gold Chloride

TLTA (H+)

### OTHER TESTS

GC

## PRELIMINARY TEST RESULTS

RESULTS cocaine

DATE 5-18-09

## GC/MS CONFIRMATORY TEST

RESULTS cocaine

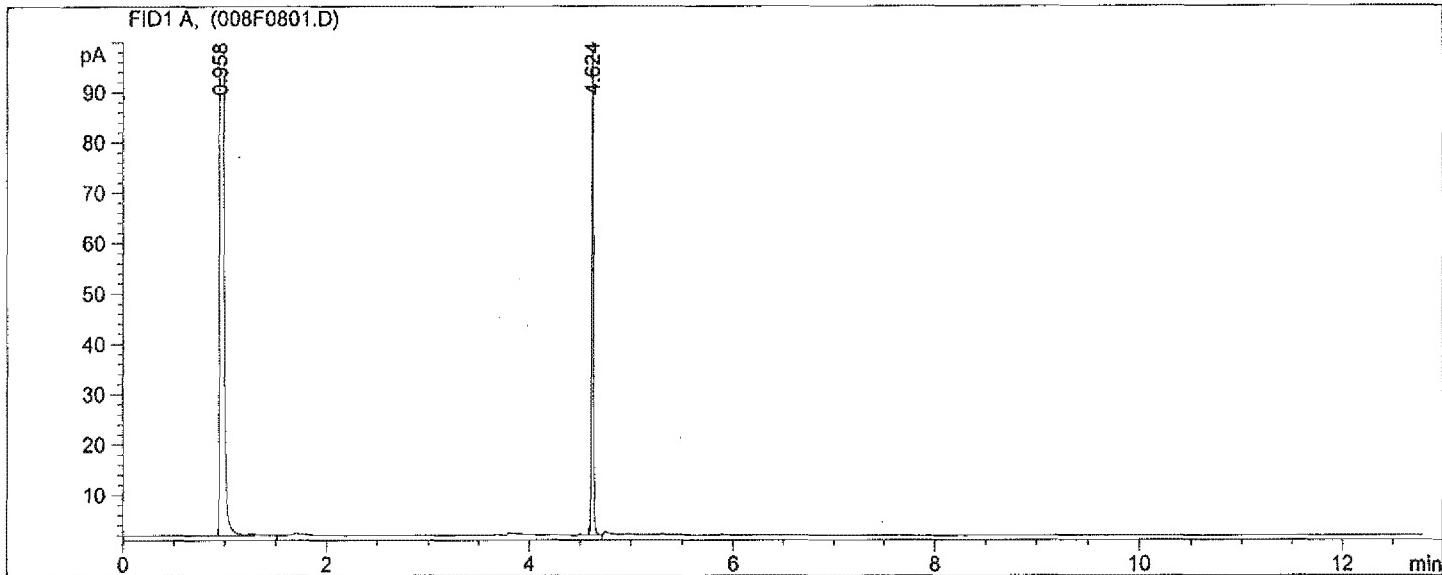
MS OPERATOR ASD

DATE 5-22-09

=====  
Injection Date : 5/18/2009 3:31:43 PM Seq. Line : 8  
Sample Name : [REDACTED] Vial : 8  
Acq. Operator : ASD Inj : 1  
Inj Volume : 1  $\mu$ l

Sequence File : C:\HPCHEM\1\SEQUENCE\DCS.S  
Method : C:\HPCHEM\1\METHODS\ROUTINE.M  
Last changed : 3/16/2009 4:48:01 PM by ASD

## FOR UNKNOWN SAMPLES

=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier : 1.0000  
Dilution : 1.0000

Signal 1: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	0.958	PB S	0.0154	2.58395e4	2.54117e4	99.50141
2	4.624	BV	0.0192	129.47894	106.41172	0.49859

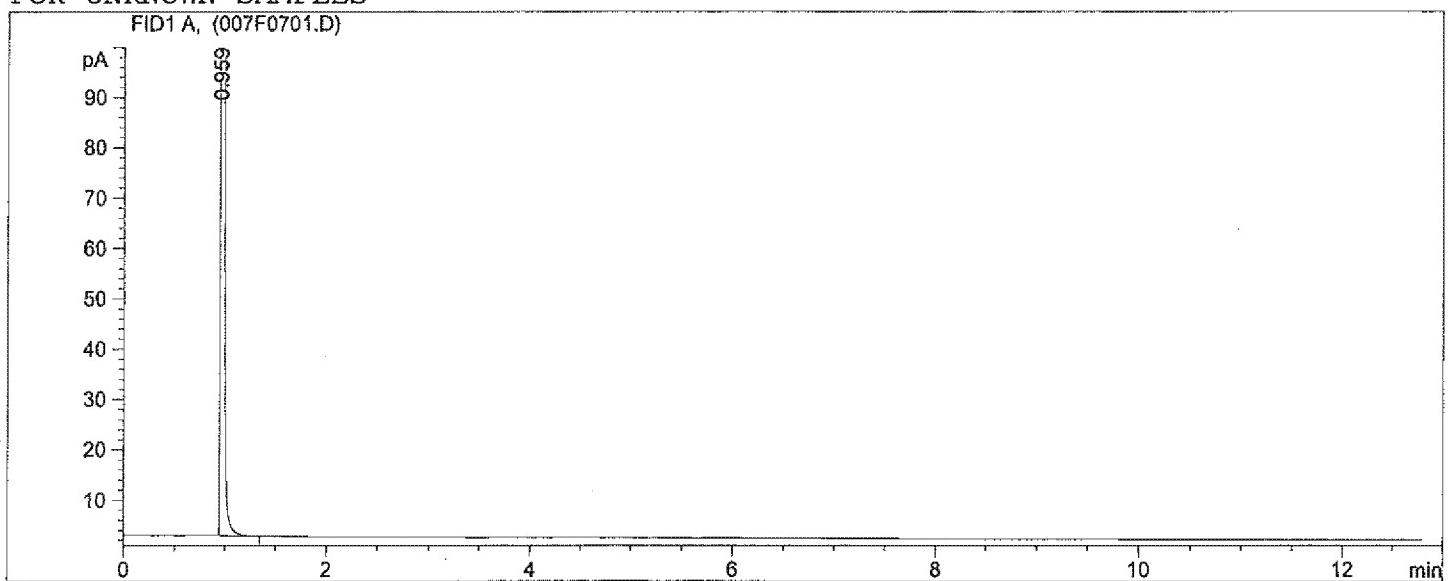
Totals : 2.59689e4 2.55181e4

Results obtained with enhanced integrator!

=====  
\*\*\* End of Report \*\*\*

=====  
Injection Date : 5/18/2009 3:13:41 PM Seq. Line : 7  
Sample Name : BLANK Vial : 7  
Acq. Operator : ASD Inj : 1  
Inj Volume : 1  $\mu$ l

Sequence File : C:\HPCHEM\1\SEQUENCE\DCS.S  
Method : C:\HPCHEM\1\METHODS\ROUTINE.M  
Last changed : 3/16/2009 4:48:01 PM by ASD  
FOR UNKNOWN SAMPLES



=====  
Area Percent Report  
=====

Sorted By : Signal  
Multiplier : 1.0000  
Dilution : 1.0000

Signal 1: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	0.959	BB S	0.0161	2.76934e4	2.56664e4	1.000e2

Totals : 2.76934e4 2.56664e4

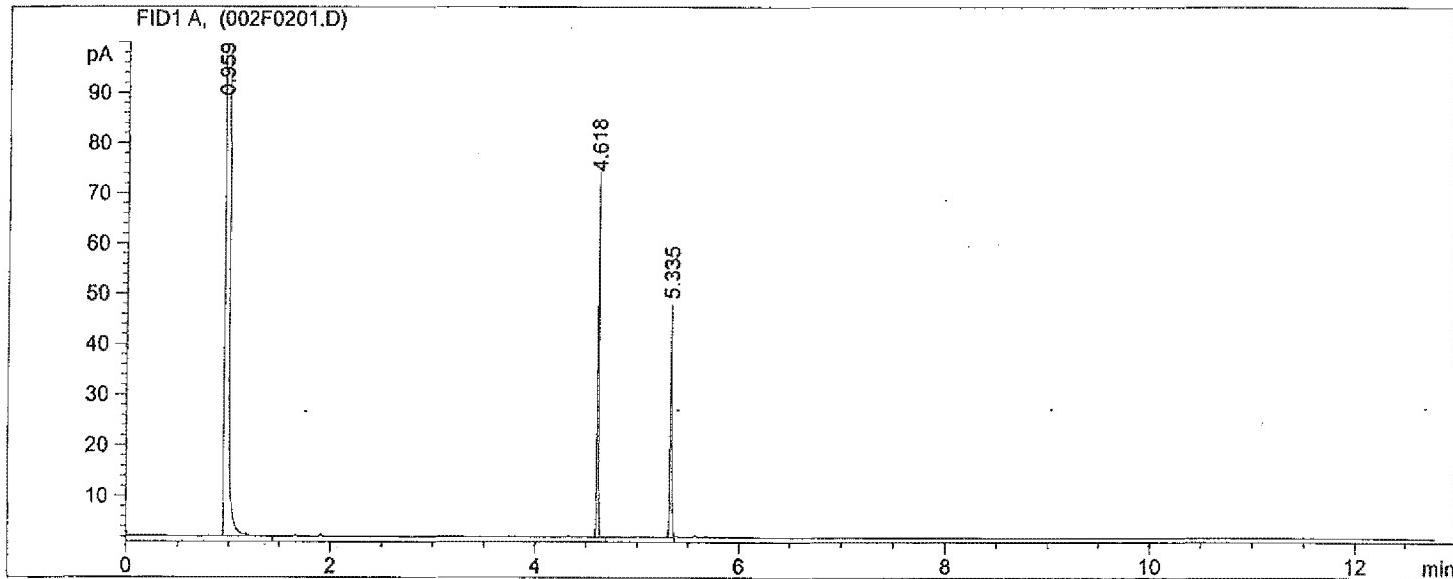
Results obtained with enhanced integrator!

=====  
\*\*\* End of Report \*\*\*

=====
 Injection Date : 5/18/2009 1:43:50 PM Seq. Line : 2
 Sample Name : COKE/CODEINE STD Vial : 2
 Acq. Operator : ASD Inj : 1
 Inj Volume : 1  $\mu$ l

Sequence File : C:\HPCHEM\1\SEQUENCE\DCS.S
 Method : C:\HPCHEM\1\METHODS\ROUTINE.M
 Last changed : 3/16/2009 4:48:01 PM by ASD

## FOR UNKNOWN SAMPLES



## Area Percent Report

Sorted By : Signal
 Multiplier : 1.0000
 Dilution : 1.0000

Signal 1: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Height [pA]	Area %
1	0.959	BB	S	0.0157	2.64259e4	2.51678e4 99.55373
2	4.618	BB		0.0147	65.42208	71.26148 0.24646
3	5.335	BV		0.0185	53.03603	45.91020 0.19980

Totals : 2.65443e4 2.52850e4

Results obtained with enhanced integrator!

\*\*\* End of Report \*\*\*

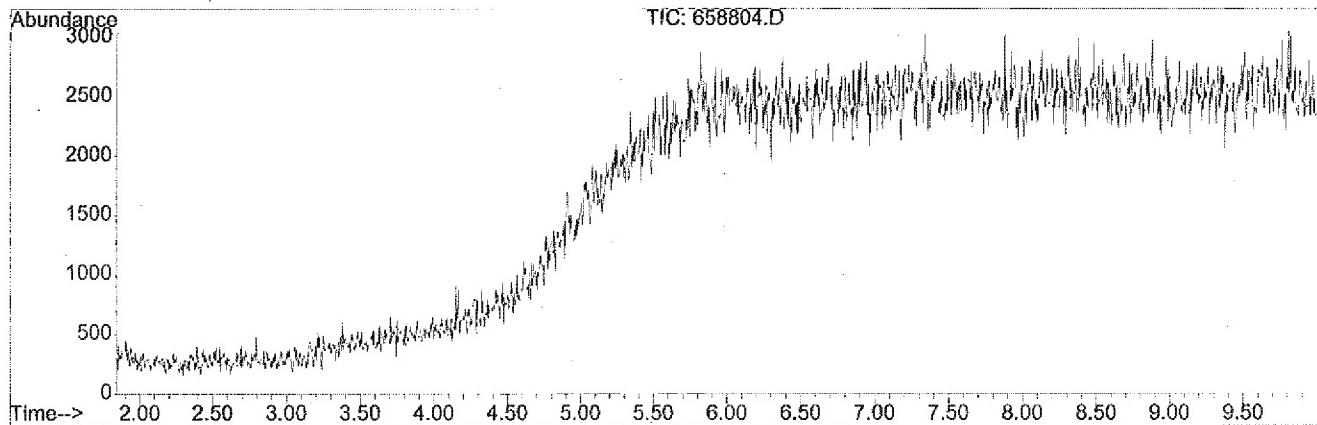
Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658804.D  
Operator : ASD  
Date Acquired : 20 May 2009 8:29  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

ASD  
5-31-11



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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

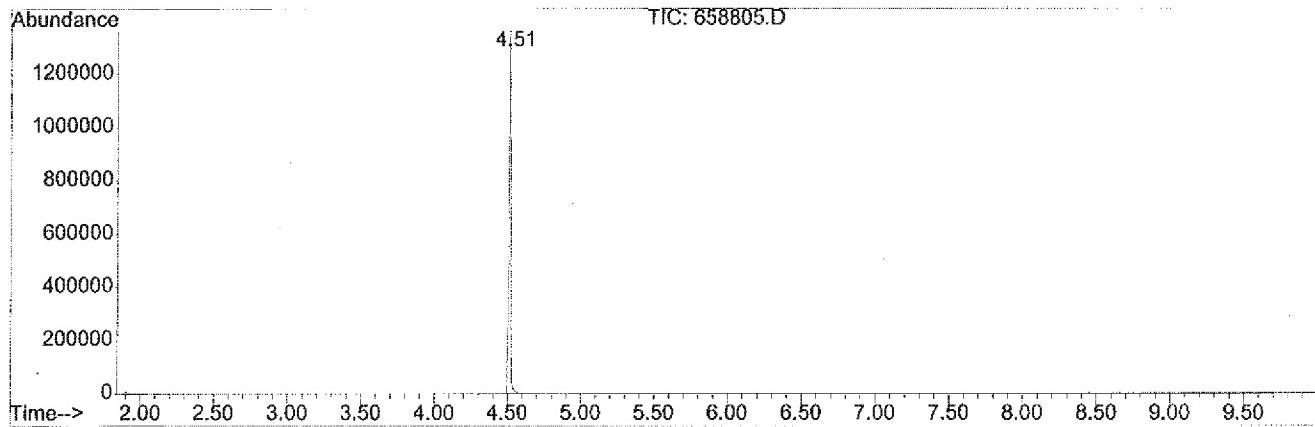
# Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658805.D  
Operator : ASD  
Date Acquired : 20 May 2009 8:41  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 5  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
4.511	1167685	100.00	100.00

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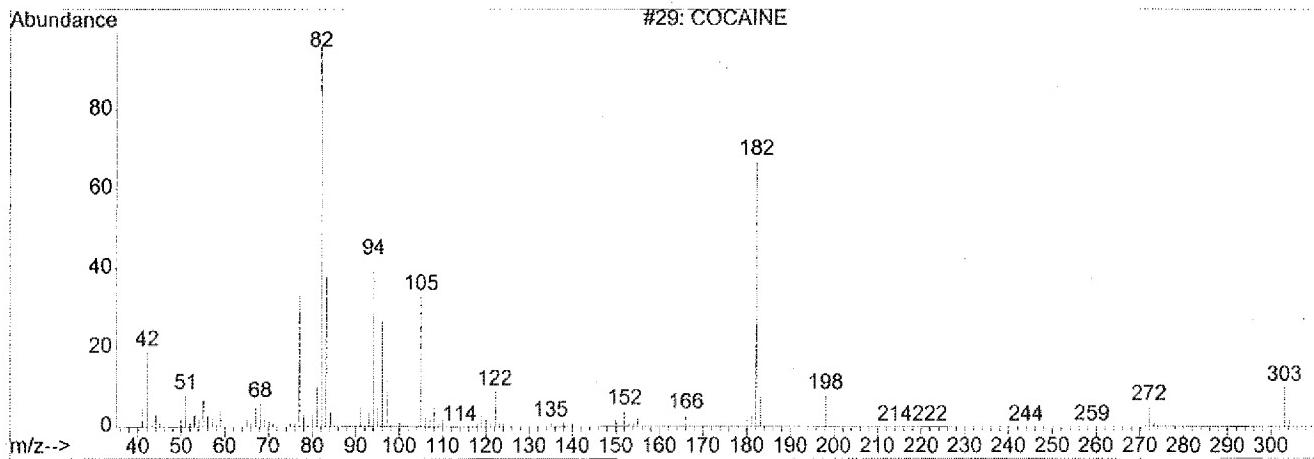
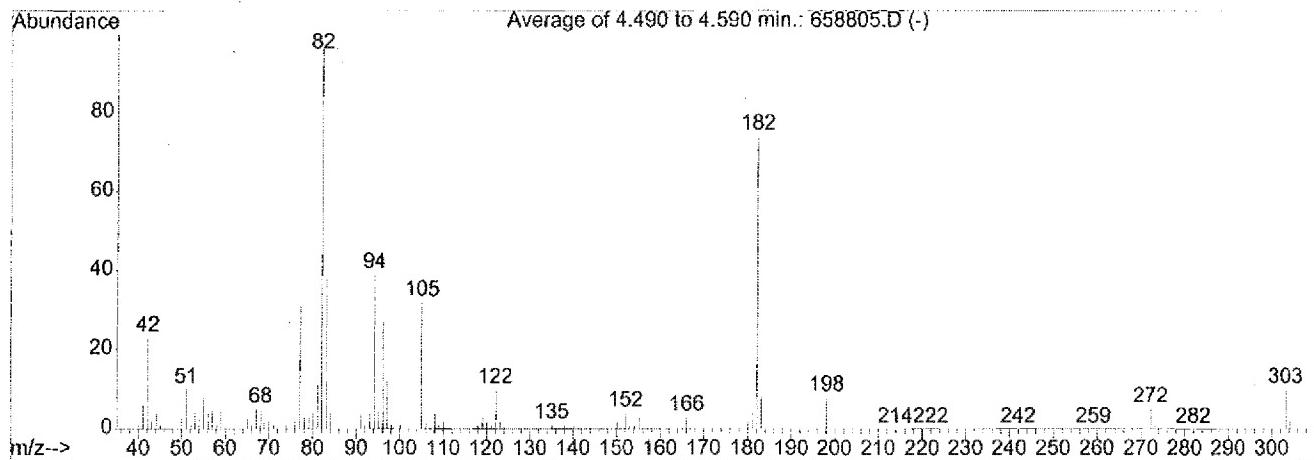
# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658805.D  
Operator : ASD  
Date Acquired : 20 May 2009 8:41  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 5  
AcquisitionMeth: DRUGS  
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.51	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



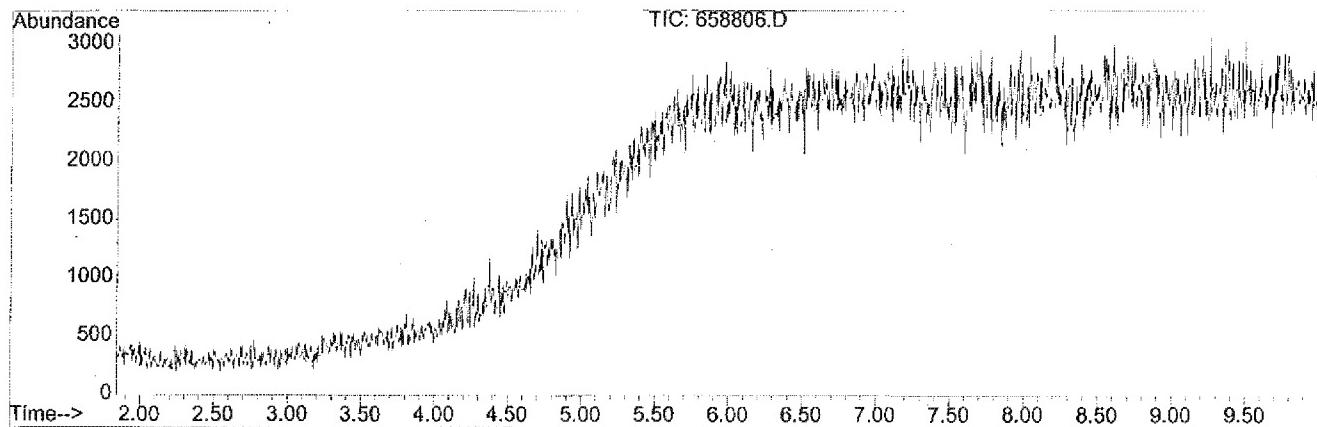
# Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658806.D  
Operator : ASD  
Date Acquired : 20 May 2009 8:54  
Sample Name : BLANK  
Submitted by : LAG  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

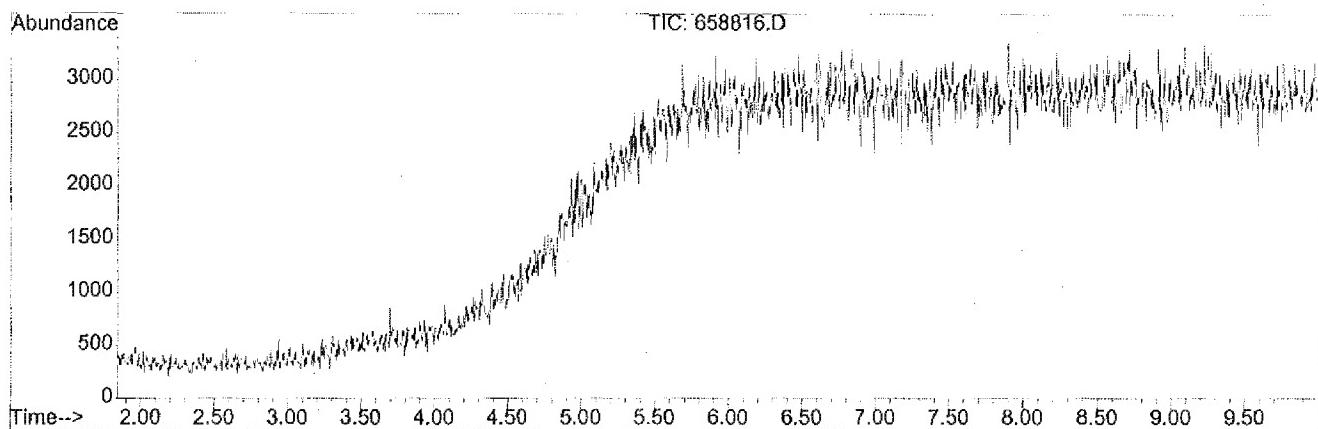
# Area Percent / Library Search Report

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**Information from Data File:**

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658816.D  
Operator : ASD  
Date Acquired : 20 May 2009 11:00  
Sample Name : BLANK  
Submitted by : SLF  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

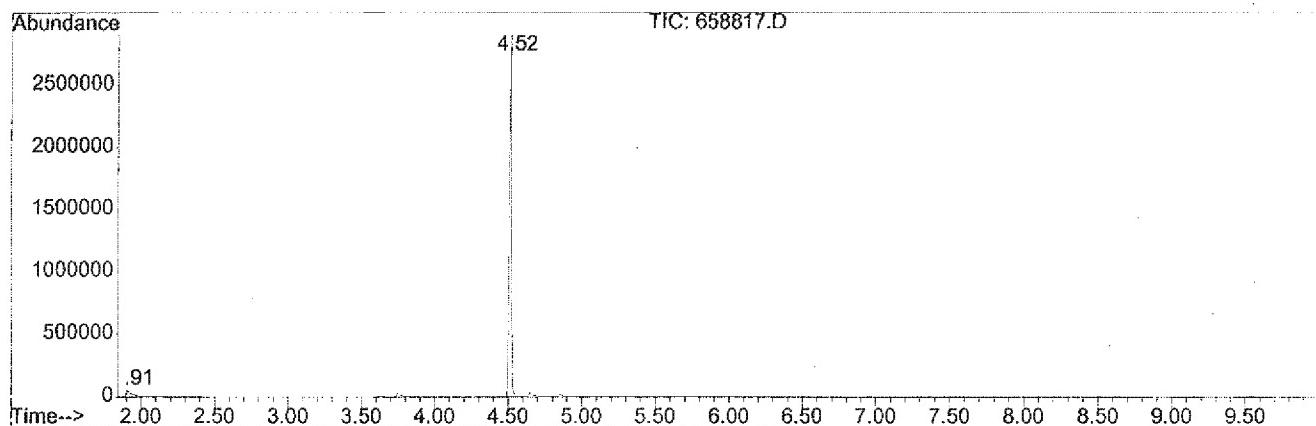
# Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658817.D  
Operator : ASD  
Date Acquired : 20 May 2009 11:13  
Sample Name : [REDACTED]  
Submitted by : SLF  
Vial Number : 17  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
1.906	139142	4.48	4.69
4.516	2968221	95.52	100.00

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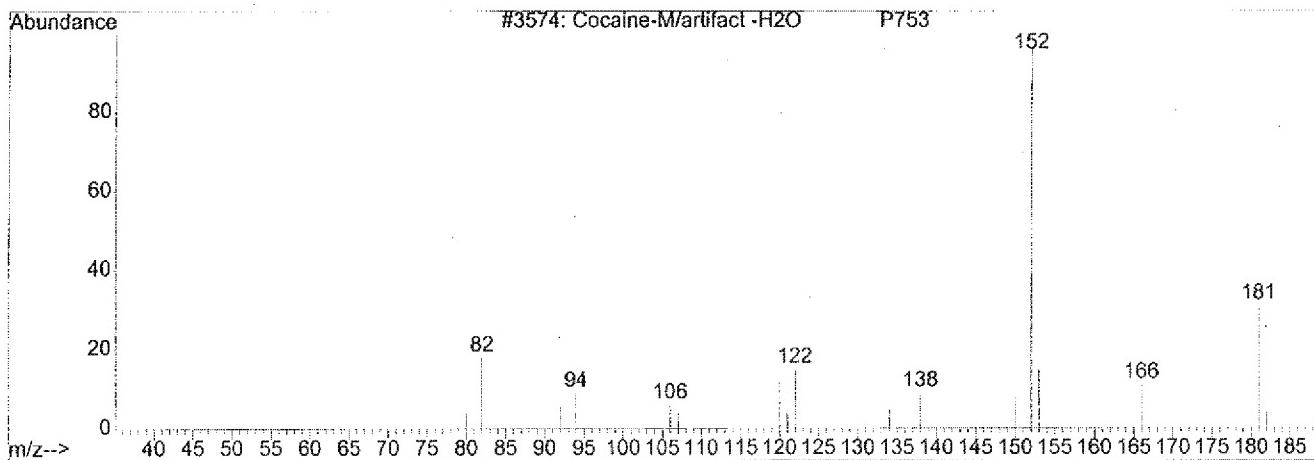
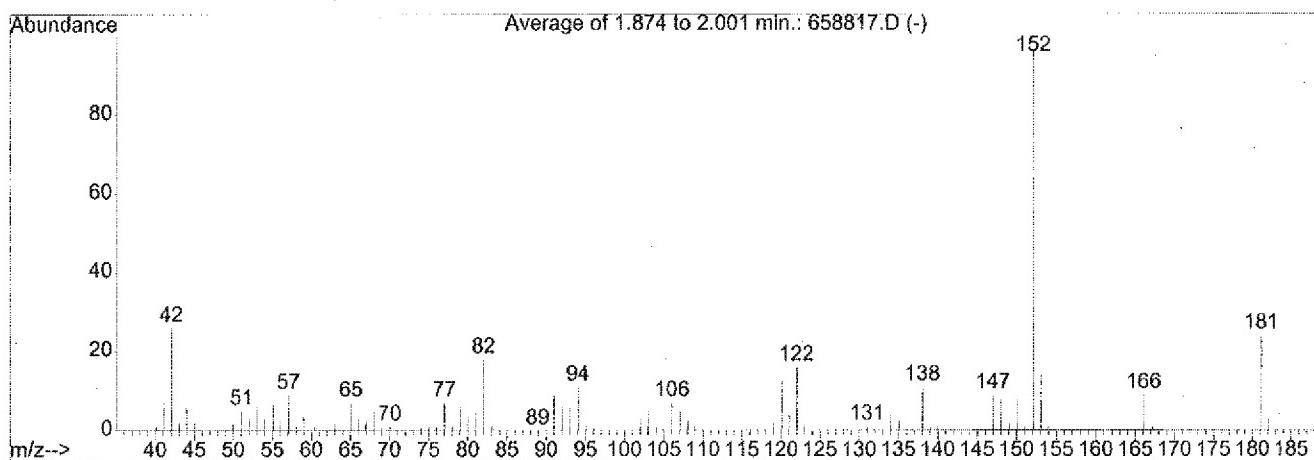
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658817.D  
 Operator : ASD  
 Date Acquired : 20 May 2009 11:13  
 Sample Name : [REDACTED]  
 Submitted by : SLF  
 Vial Number : 17  
 AcquisitionMeth: DRUGS  
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
                   C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
                   C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	1.91	C:\DATABASE\PMW_TOX2.L		
		Cocaine-M/artifact -H2O	000000-00-0	97
		MDA-M (desmethylenyl-methyl-) ME	@ 000000-00-0	38
		Metipranolol-M/artifact AC	000000-00-0	23



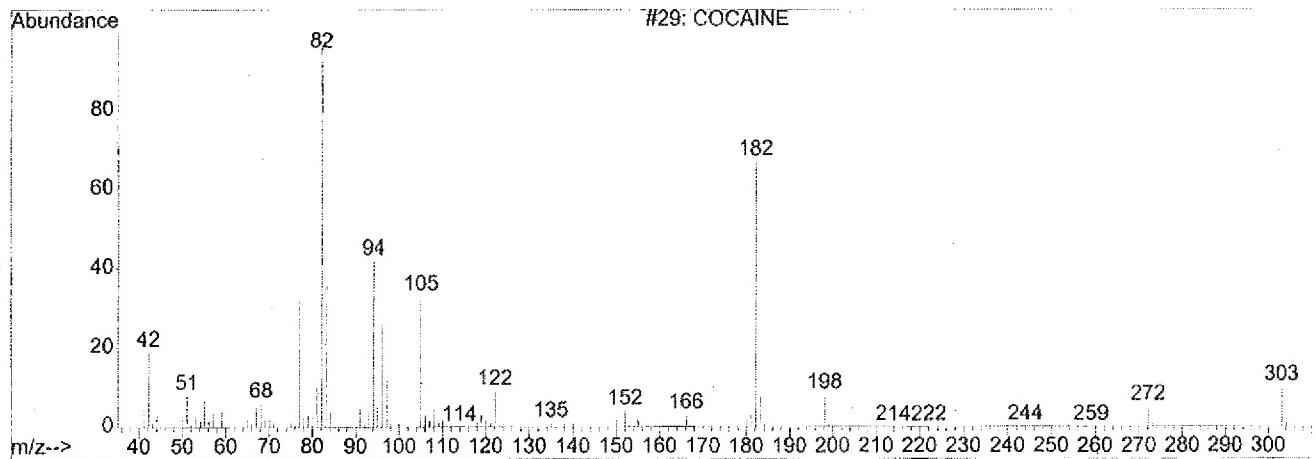
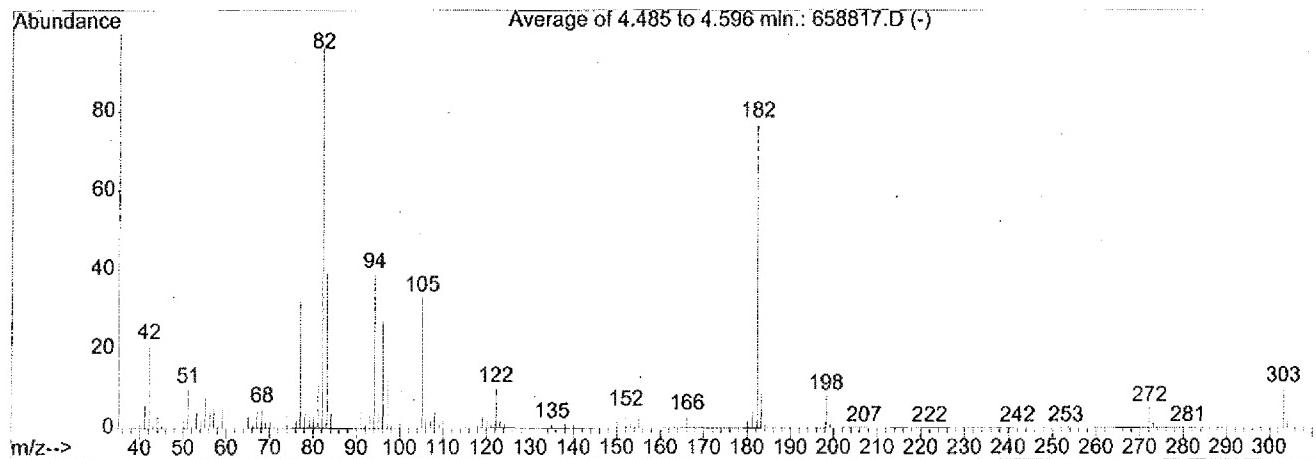
# Area Percent / Library Search Report

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File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658817.D  
Operator : ASD  
Date Acquired : 20 May 2009 11:13  
Sample Name : XXXXXXXXXX  
Submitted by : SLF  
Vial Number : 17  
AcquisitionMeth: DRUGS  
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
2	4.52	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



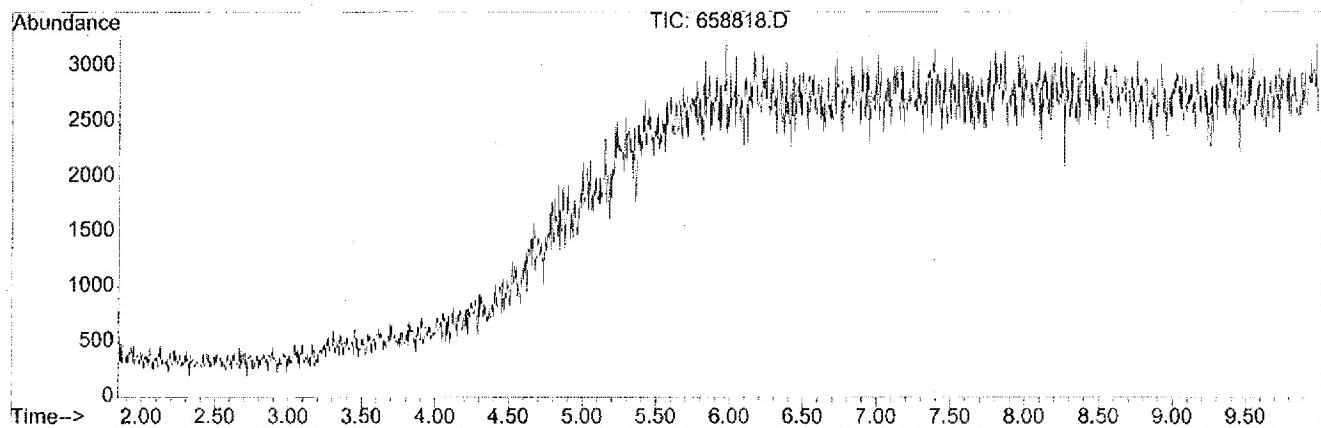
# Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658818.D  
Operator : ASD  
Date Acquired : 20 May 2009 11:25  
Sample Name : BLANK  
Submitted by : SLF  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

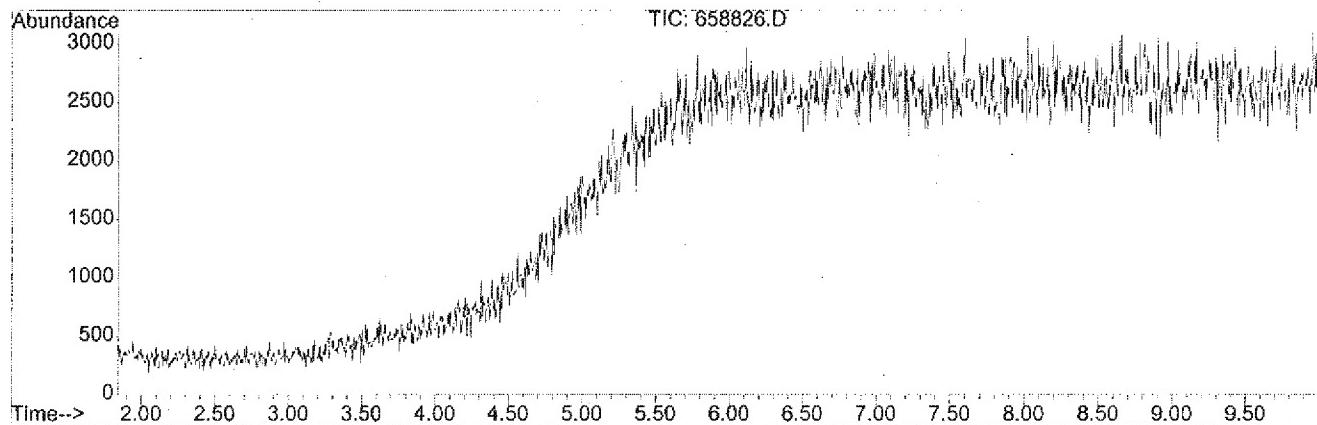
# Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658826.D  
Operator : ASD  
Date Acquired : 20 May 2009 13:07  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

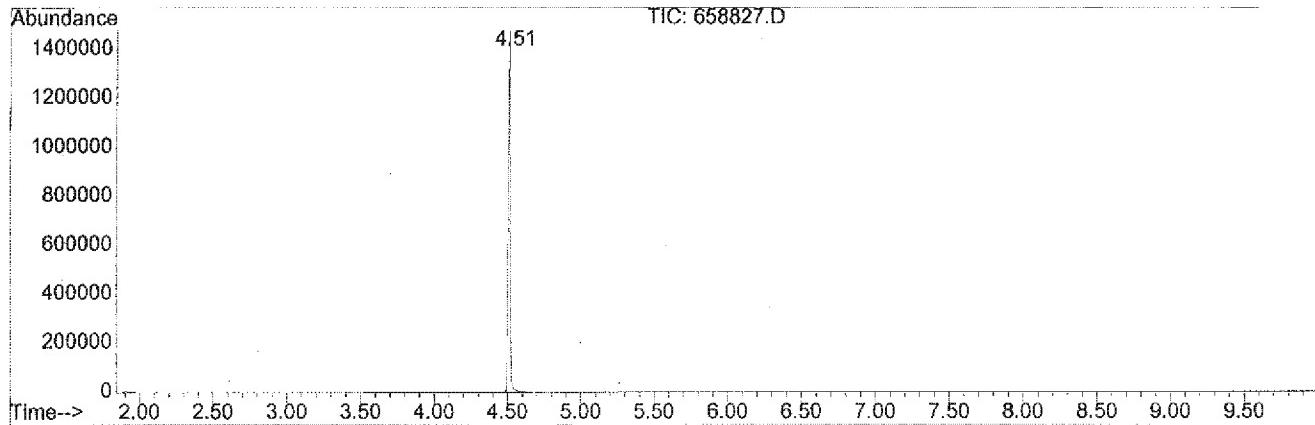
# Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658827.D  
Operator : ASD  
Date Acquired : 20 May 2009 13:19  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 27  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
4.511	1338706	100.00	100.00

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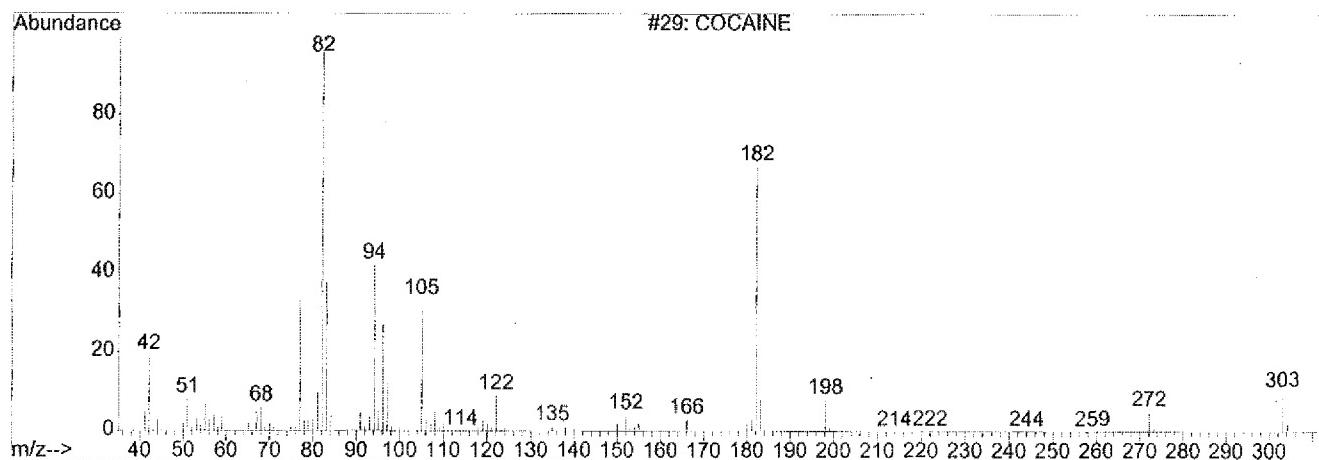
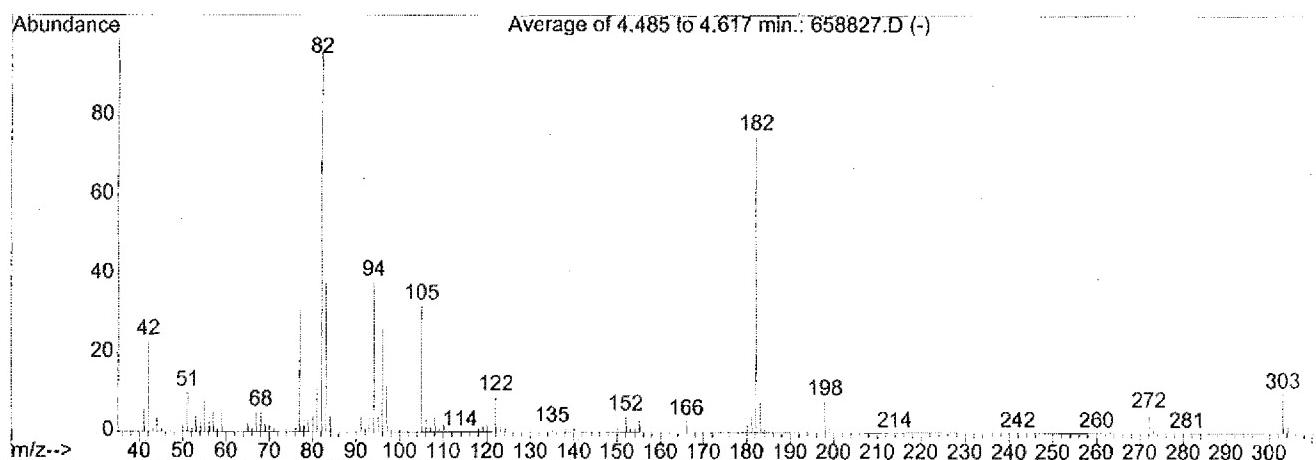
# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658827.D  
Operator : ASD  
Date Acquired : 20 May 2009 13:19  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 27  
AcquisitionMeth: DRUGS  
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	4.51	C:\DATABASE\SLI.L COCAINE	000050-36-2	99



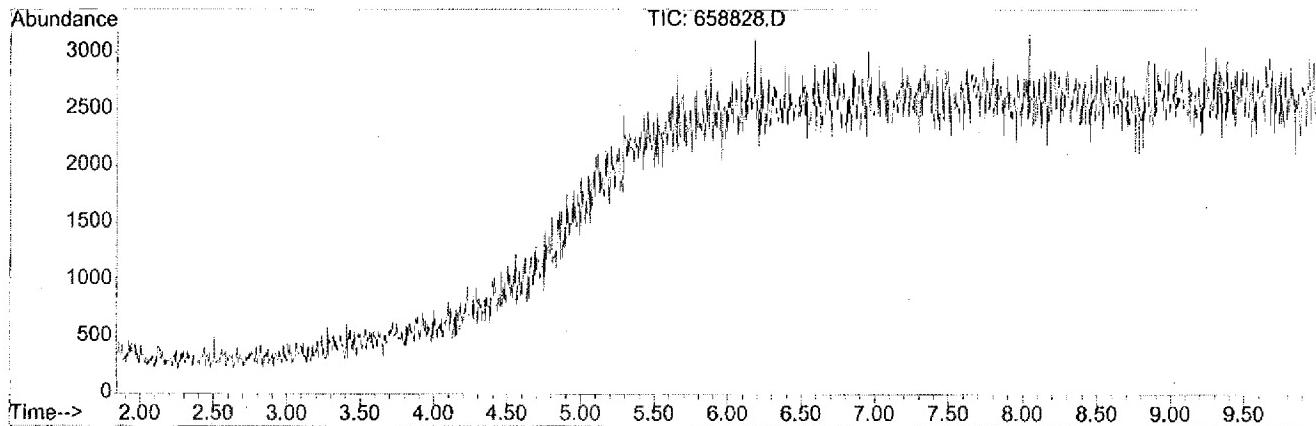
Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q2-2009\SYSTEM7\05\_20\_09\658828.D  
Operator : ASD  
Date Acquired : 20 May 2009 13:32  
Sample Name : BLANK  
Submitted by : NEM  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*